

#2

TECH CENTER 160012900

APR 22 2002

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1646

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/445,258A

DATE: 04/12/2002

TIME: 14:40:47

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\04122002\I445258A.raw

p.6

ENTERED

4 <110> APPLICANT: Kato, Seishi
 5 Sekine, Shingo
 6 Kimura, Tomoko
 8 <120> TITLE OF INVENTION: HUMAN PROTEINS HAVING TRANSMEMBRANE
 9 DOMAINS AND DNAs ENCODING THESE PROTEINS
 11 <130> FILE REFERENCE: GIN-6706CPUS
 13 <140> CURRENT APPLICATION NUMBER: 09/445,258A
 14 <141> CURRENT FILING DATE: 1999-12-01
 16 <150> PRIOR APPLICATION NUMBER: PCT/US98/02445
 17 <151> PRIOR FILING DATE: 1998-06-03
 19 <150> PRIOR APPLICATION NUMBER: JP 9-144948
 20 <151> PRIOR FILING DATE: 1997-06-03
 22 <160> NUMBER OF SEQ ID NOS: 67
 24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 382
 28 <212> TYPE: PRT
 29 <213> ORGANISM: Homo sapiens
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 33 1 5 10 15
 34 Gly Ala Met Ser Pro Pro Gln Leu Ala Leu Asn Pro Ser Ala Leu Leu
 35 20 25 30
 36 Ser Arg Gly Cys Asn Asp Ser Asp Val Leu Ala Val Ala Gly Phe Ala
 37 35 40 45
 38 Leu Arg Asp Ile Asn Lys Asp Arg Lys Asp Gly Tyr Val Leu Arg Leu
 39 50 55 60
 40 Asn Arg Val Asn Asp Ala Gln Glu Tyr Arg Arg Gly Gly Leu Gly Ser
 41 65 70 75 80
 42 Leu Phe Tyr Leu Thr Leu Asp Val Leu Glu Thr Asp Cys His Val Leu
 43 85 90 95
 44 Arg Lys Lys Ala Trp Gln Asp Cys Gly Met Arg Ile Phe Phe Glu Ser
 45 100 105 110
 46 Val Tyr Gly Gln Cys Lys Ala Ile Phe Tyr Met Asn Asn Pro Ser Arg
 47 115 120 125
 48 Val Leu Tyr Leu Ala Ala Tyr Asn Cys Thr Leu Arg Pro Val Ser Lys
 49 130 135 140
 50 Lys Lys Ile Tyr Met Thr Cys Pro Asp Cys Pro Ser Ser Ile Pro Thr
 51 145 150 155 160
 52 Asp Ser Ser Asn His Gln Val Leu Glu Ala Ala Thr Glu Ser Leu Ala
 53 165 170 175
 54 Lys Tyr Asn Asn Glu Asn Thr Ser Lys Gln Tyr Ser Leu Phe Lys Val
 55 180 185 190

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56 Thr Arg Ala Ser Ser Gln Trp Val Val Gly Pro Ser Tyr Phe Val Glu
57      195      200      205
58 Tyr Leu Ile Lys Glu Ser Pro Cys Thr Lys Ser Gln Ala Ser Ser Cys
59      210      215      220
60 Ser Leu Gln Ser Ser Asp Ser Val Pro Val Gly Leu Cys Lys Gly Ser
61 225      230      235      240
62 Leu Thr Arg Thr His Trp Glu Lys Phe Val Ser Val Thr Cys Asp Phe
63      245      250      255
64 Phe Glu Ser Gln Ala Pro Ala Thr Gly Ser Glu Asn Ser Ala Val Asn
65      260      265      270
66 Gln Lys Pro Thr Asn Leu Pro Lys Val Glu Glu Ser Gln Gln Lys Asn
67      275      280      285
68 Thr Pro Pro Thr Asp Ser Pro Ser Lys Ala Gly Pro Arg Gly Ser Val
69      290      295      300
70 Gln Tyr Leu Pro Asp Leu Asp Asp Lys Asn Ser Gln Glu Lys Gly Pro
71 305      310      315      320
72 Gln Glu Ala Phe Pro Val His Leu Asp Leu Thr Thr Asn Pro Gln Gly
73      325      330      335
74 Glu Thr Leu Asp Ile Ser Phe Leu Phe Leu Glu Pro Met Glu Glu Lys
75      340      345      350
76 Leu Val Val Leu Pro Phe Pro Lys Glu Lys Ala Arg Thr Ala Glu Cys
77      355      360      365
78 Pro Gly Pro Ala Gln Asn Ala Ser Pro Leu Val Leu Pro Pro
79      370      375      380
82 <210> SEQ ID NO: 2
83 <211> LENGTH: 317
84 <212> TYPE: PRT
85 <213> ORGANISM: Homo sapiens
87 <400> SEQUENCE: 2
88 Met Trp Leu Tyr Leu Ala Ala Phe Val Gly Leu Tyr Tyr Leu Leu His
89 1      5      10      15
90 Trp Tyr Arg Glu Arg Gln Val Val Ser His Leu Gln Asp Lys Tyr Val
91      20      25      30
92 Phe Ile Thr Gly Cys Asp Ser Gly Phe Gly Asn Leu Leu Ala Arg Gln
93      35      40      45
94 Leu Asp Ala Arg Gly Leu Arg Val Leu Ala Ala Cys Leu Thr Glu Lys
95      50      55      60
96 Gly Ala Glu Gln Leu Arg Gly Gln Thr Ser Asp Arg Leu Glu Thr Val
97 65      70      75      80
98 Thr Leu Asp Val Thr Lys Met Glu Ser Ile Ala Ala Ala Thr Gln Trp
99      85      90      95
100 Val Lys Glu His Val Gly Asp Arg Gly Leu Trp Gly Leu Val Asn Asn
101      100      105      110
102 Ala Gly Ile Leu Thr Pro Ile Thr Leu Cys Glu Trp Leu Asn Thr Glu
103      115      120      125
104 Asp Ser Met Asn Met Leu Lys Val Asn Leu Ile Gly Val Ile Gln Val
105      130      135      140
106 Thr Leu Ser Met Leu Pro Leu Val Arg Arg Ala Arg Gly Arg Ile Val
107 145      150      155      160

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108 Asn Val Ser Ser Ile Leu Gly Arg Val Ala Phe Phe Val Gly Gly Tyr
109          165          170          175
110 Cys Val Ser Lys Tyr Gly Val Glu Ala Phe Ser Asp Ile Leu Arg Arg
111          180          185          190
112 Glu Ile Gln His Phe Gly Val Lys Ile Ser Ile Val Glu Pro Gly Tyr
113          195          200          205
114 Phe Arg Thr Gly Met Thr Asn Met Thr Gln Ser Leu Glu Arg Met Lys
115          210          215          220
116 Gln Ser Trp Lys Glu Ala Pro Lys His Ile Lys Glu Thr Tyr Gly Gln
117 225          230          235          240
118 Gln Tyr Phe Asp Ala Leu Tyr Asn Ile Met Lys Glu Gly Leu Leu Asn
119          245          250          255
120 Cys Ser Thr Asn Leu Asn Leu Val Thr Asp Cys Met Glu His Ala Leu
121          260          265          270
122 Thr Ser Val His Pro Arg Thr Arg Tyr Ser Ala Gly Trp Asp Ala Lys
123          275          280          285
124 Phe Phe Phe Ile Pro Leu Ser Tyr Leu Pro Thr Ser Leu Ala Asp Tyr
125          290          295          300
126 Ile Leu Thr Arg Ser Trp Pro Lys Pro Ala Gln Ala Val
127 305          310          315
130 <210> SEQ ID NO: 3
131 <211> LENGTH: 296
132 <212> TYPE: PRT
133 <213> ORGANISM: Homo sapiens
135 <400> SEQUENCE: 3
136 Met Ser Asp Ser Lys Glu Pro Arg Val Gln Gln Leu Gly Leu Leu Gly
137 1          5          10          15
138 Cys Leu Gly His Gly Ala Leu Val Leu Gln Leu Leu Ser Phe Met Leu
139          20          25          30
140 Leu Ala Gly Val Leu Val Ala Ile Leu Val Gln Val Ser Lys Val Pro
141          35          40          45
142 Ser Ser Leu Ser Gln Glu Gln Ser Glu Gln Asp Ala Ile Tyr Gln Asn
143          50          55          60
144 Leu Thr Gln Leu Lys Ala Ala Val Gly Glu Leu Ser Glu Lys Ser Lys
145 65          70          75          80
146 Leu Gln Glu Ile Tyr Gln Glu Leu Thr Gln Leu Lys Ala Ala Val Gly
147          85          90          95
148 Glu Leu Pro Glu Lys Ser Lys Leu Gln Glu Ile Tyr Gln Glu Leu Thr
149          100          105          110
150 Arg Leu Lys Ala Ala Val Gly Glu Leu Pro Glu Lys Ser Lys Leu Gln
151          115          120          125
152 Glu Ile Tyr Gln Glu Leu Thr Arg Leu Lys Ala Ala Val Gly Glu Leu
153          130          135          140
154 Pro Glu Lys Ser Lys Leu Gln Glu Ile Tyr Gln Glu Leu Thr Arg Leu
155 145          150          155          160
156 Lys Ala Ala Val Gly Glu Leu Pro Glu Lys Ser Lys Leu Gln Glu Ile
157          165          170          175
158 Tyr Gln Glu Leu Thr Glu Leu Lys Ala Ala Val Gly Glu Leu Pro Glu
159          180          185          190

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Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\04122002\I445258A.raw

```

160 Lys Ser Lys Leu Gln Glu Ile Tyr Gln Glu Leu Thr Gln Leu Lys Ala
161      195      200      205
162 Ala Val Gly Glu Leu Pro Asp Gln Ser Lys Gln Gln Ile Tyr Gln
163      210      215      220
164 Glu Leu Thr Asp Leu Lys Thr Ala Phe Glu Arg Leu Cys Arg His Cys
165 225      230      235      240
166 Pro Lys Asp Trp Thr Phe Phe Gln Gly Asn Cys Tyr Phe Met Ser Asn
167      245      250      255
168 Ser Gln Arg Asn Trp His Asp Ser Val Thr Ala Cys Gln Glu Val Arg
169      260      265      270
170 Ala Gln Leu Val Val Ile Lys Thr Ala Glu Glu Gln Leu Pro Ala Val
171      275      280      285
172 Leu Glu Gln Trp Arg Thr Gln Gln
173      290      295
176 <210> SEQ ID NO: 4
177 <211> LENGTH: 197
178 <212> TYPE: PRT
179 <213> ORGANISM: Homo sapiens
181 <400> SEQUENCE: 4
182 Met Cys Thr Gly Lys Cys Ala Arg Cys Val Gly Leu Ser Leu Ile Thr
183 1      5      10      15
184 Leu Cys Leu Val Cys Ile Val Ala Asn Ala Leu Leu Leu Val Pro Asn
185      20      25      30
186 Gly Glu Thr Ser Trp Thr Asn Thr Asn His Leu Ser Leu Gln Val Trp
187      35      40      45
188 Leu Met Gly Gly Phe Ile Gly Gly Gly Leu Met Val Leu Cys Pro Gly
189      50      55      60
190 Ile Ala Ala Val Arg Ala Gly Gly Lys Gly Cys Cys Gly Ala Gly Cys
191 65      70      75      80
192 Cys Gly Asn Arg Cys Arg Met Leu Arg Ser Val Phe Ser Ser Ala Phe
193      85      90      95
194 Gly Val Leu Gly Ala Ile Tyr Cys Leu Ser Val Ser Gly Ala Gly Leu
195      100      105      110
196 Arg Asn Gly Pro Arg Cys Leu Met Asn Gly Glu Trp Gly Tyr His Phe
197      115      120      125
198 Glu Asp Thr Ala Gly Ala Tyr Leu Leu Asn Arg Thr Leu Trp Asp Arg
199      130      135      140
200 Cys Glu Ala Pro Pro Arg Val Val Pro Trp Asn Val Thr Leu Phe Ser
201 145      150      155      160
202 Leu Leu Val Ala Ala Ser Cys Leu Glu Ile Val Leu Cys Gly Ile Gln
203      165      170      175
204 Leu Val Asn Ala Thr Ile Gly Val Phe Cys Gly Asp Cys Arg Lys Lys
205      180      185      190
206 Gln Asp Thr Pro His
207      195
210 <210> SEQ ID NO: 5
211 <211> LENGTH: 221
212 <212> TYPE: PRT
213 <213> ORGANISM: Homo sapiens

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TIME: 14:40:47

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\04122002\I445258A.raw

215 <400> SEQUENCE: 5

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216 Met Glu Ala Gly Gly Phe Leu Asp Ser Leu Ile Tyr Gly Ala Cys Val
217 1 5 10 15
218 Val Phe Thr Leu Gly Met Phe Ser Ala Gly Leu Ser Asp Leu Arg His
219 20 25 30
220 Met Arg Met Thr Arg Ser Val Asp Asn Val Gln Phe Leu Pro Phe Leu
221 35 40 45
222 Thr Thr Glu Val Asn Asn Leu Gly Trp Leu Ser Tyr Gly Ala Leu Lys
223 50 55 60
224 Gly Asp Gly Ile Leu Ile Val Val Asn Thr Val Gly Ala Ala Leu Gln
225 65 70 75 80
226 Thr Leu Tyr Ile Leu Ala Tyr Leu His Tyr Cys Pro Arg Lys Arg Val
227 85 90 95
228 Val Leu Leu Gln Thr Ala Thr Leu Leu Gly Val Leu Leu Leu Gly Tyr
229 100 105 110
230 Gly Tyr Phe Trp Leu Leu Val Pro Asn Pro Glu Ala Arg Leu Gln Gln
231 115 120 125
232 Leu Gly Leu Phe Cys Ser Val Phe Thr Ile Ser Met Tyr Leu Ser Pro
233 130 135 140
234 Leu Ala Asp Leu Ala Lys Val Ile Gln Thr Lys Ser Thr Gln Cys Leu
235 145 150 155 160
236 Ser Tyr Pro Leu Thr Ile Ala Thr Leu Leu Thr Ser Ala Ser Trp Cys
237 165 170 175
238 Leu Tyr Gly Phe Arg Leu Arg Asp Pro Tyr Ile Met Val Ser Asn Phe
239 180 185 190
240 Pro Gly Ile Val Thr Ser Phe Ile Arg Phe Trp Leu Phe Trp Lys Tyr
241 195 200 205
242 Pro Gln Glu Gln Asp Arg Asn Tyr Trp Leu Leu Gln Thr
243 210 215 220

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246 <210> SEQ ID NO: 6

247 <211> LENGTH: 251

248 <212> TYPE: PRT

249 <213> ORGANISM: Homo sapiens

251 <400> SEQUENCE: 6

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252 Met Ser Asp Ile Gly Asp Trp Phe Arg Ser Ile Pro Ala Ile Thr Arg
253 1 5 10 15
254 Tyr Trp Phe Ala Ala Thr Val Ala Val Pro Leu Val Gly Lys Leu Gly
255 20 25 30
256 Leu Ile Ser Pro Ala Tyr Leu Phe Leu Trp Pro Glu Ala Phe Leu Tyr
257 35 40 45
258 Arg Phe Gln Ile Trp Arg Pro Ile Thr Ala Thr Phe Tyr Phe Pro Val
259 50 55 60
260 Gly Pro Gly Thr Gly Phe Leu Tyr Leu Val Asn Leu Tyr Phe Leu Tyr
261 65 70 75 80
262 Gln Tyr Ser Thr Arg Leu Glu Thr Gly Ala Phe Asp Gly Arg Pro Ala
263 85 90 95
264 Asp Tyr Leu Phe Met Leu Leu Phe Asn Trp Ile Cys Ile Val Ile Thr
265 100 105 110
266 Gly Leu Ala Met Asp Met Gln Leu Leu Met Ile Pro Leu Ile Met Ser

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/445,258A

DATE: 04/12/2002
TIME: 14:40:48

Input Set : A:\Seqlist.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:60; Xaa Pos. 4,7,16,17,18,21,23